

114TH CONGRESS  
2D SESSION

# S. 3010

To provide for restrictions related to nuclear cooperation with the People's Republic of China, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

MAY 26, 2016

Mr. MARKEY (for himself and Mr. RUBIO) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

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## A BILL

To provide for restrictions related to nuclear cooperation with the People's Republic of China, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

**3 SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “U.S.-China Nuclear  
5       Cooperation and Nonproliferation Act of 2016”.

**6 SEC. 2. FINDINGS.**

7       Congress makes the following findings:

8           (1) A 2001 report from the Department of De-  
9           fense found that “China supplied Pakistan with nu-  
10          clear material and expertise and has provided critical

1 assistance in the production of Pakistan's nuclear  
2 facilities." China is also alleged to have provided  
3 Pakistan with 50 kilograms of highly enriched ura-  
4 nium, and designs for a nuclear weapon.

5 (2) An unclassified 2011 report to Congress  
6 from the Director of National Intelligence found  
7 that Chinese entities "continue to supply a variety  
8 of missile-related items to multiple customers, in-  
9 cluding Iran and Pakistan." Previous reports from  
10 the Director of National Intelligence have confirmed  
11 that Chinese entities have provided support for the  
12 missile program of North Korea.

13 (3) China has failed to bring to justice Li  
14 Fangwei, also known as Karl Lee, who has been in-  
15 dicted in the United States on charges of providing  
16 sensitive missile technology to Iran. According to a  
17 report from the Congressional Research Service,  
18 "concerns persist about Chinese willingness as well  
19 as ability to detect and prevent illicit transfers" of  
20 dual-use and sensitive nuclear and missile items.

21 (4) At a May 12, 2015, hearing, members of  
22 the Committee on Foreign Relations of the Senate  
23 raised concerns that China may have diverted reac-  
24 tor cooling pumps produced by Curtiss-Wright Cor-  
25 poration to its nuclear submarine program, bol-

1           stering the stealth of its submarines, and violating  
2           the Previous Nuclear Cooperation Agreement (as  
3           that term is defined in section 3(3)).

4           (5) China has announced plans to provide Paki-  
5           stan with additional nuclear reactors, beyond those  
6           it had already agreed to construct prior to 2004, in  
7           violation of its 2004 commitments to the Nuclear  
8           Suppliers Group (NSG).

9           (6) Five members of the Chinese People's Lib-  
10          eration Army have been indicted in the United  
11          States on charges of hacking into the computer net-  
12          works of Westinghouse and stealing United States  
13          intellectual property, including the design of nuclear  
14          power plants.

15          (7) China has announced plans to export nu-  
16          clear power plants based on technology acquired  
17          from Westinghouse, one of China's primary commer-  
18          cial partners under its current and previous nuclear  
19          cooperation agreements with the United States.  
20          While China has committed not to export United  
21          States-origin technology without a marketing license  
22          from Westinghouse, there is no definition of "United  
23          States-origin technology" in the Federal Register,  
24          complicating United States enforcement of this pro-  
25          vision.

1                             (8) China General Nuclear Power Company, a  
2 state-owned nuclear power provider, has been in-  
3 dicted in the United States on charges of unlawfully  
4 producing special nuclear material outside the  
5 United States without the authorization of the De-  
6 partment of Energy.

7                             (9) China’s plans to reprocess United States-or-  
8 igin spent fuel raise the risk that China could divert  
9 plutonium to military purposes, enabling it to  
10 produce additional nuclear weapons that threaten  
11 the United States and its allies.

12                             (10) Secretary of Energy Ernest Moniz, in Bei-  
13 jing on March 17, 2016, told the Wall Street Jour-  
14 nal that the United States does not “support large-  
15 scale reprocessing” and China’s plan to proceed with  
16 a commercial-scale reprocessing facility “certainly  
17 isn’t a positive in terms of nonproliferation”.

18                             (11) China’s pursuit of commercial plutonium  
19 reprocessing will increase the likelihood that Japan  
20 expands its commercial reprocessing program and  
21 that South Korea will increase efforts to initiate a  
22 similar program of its own. Growing stockpiles of  
23 plutonium in East Asia increase the chances of mili-  
24 tary diversion and theft, raising the risk of nuclear  
25 proliferation, nuclear terrorism, and interstate nu-

1       clear conflict. It is in the interest of the United  
2       States to prevent the stockpiling of plutonium in  
3       East Asia.

4 **SEC. 3. DEFINITIONS.**

5       In this Act:

6                 (1) APPROPRIATE CONGRESSIONAL COMMIT-  
7       TEES.—The term “appropriate congressional com-  
8       mittees” means—

9                         (A) the Committee on Foreign Relations  
10          and the Select Committee on Intelligence of the  
11          Senate; and

12                         (B) the Committee on Foreign Affairs and  
13          the Permanent Select Committee on Intelligence  
14          of the House of Representatives.

15                 (2) CHINA.—The term “China” means the Peo-  
16          ple’s Republic of China.

17                 (3) CHINESE PERSON.—The term “Chinese  
18          person” means—

19                         (A) an individual who is a citizen or na-  
20          tional of the People’s Republic of China; or

21                         (B) an entity organized under the laws of  
22          the People’s Republic of China or otherwise  
23          subject to the jurisdiction of the Government of  
24          the People’s Republic of China.

1                             (4) PREVIOUS NUCLEAR COOPERATION AGREEMENT.—The term “Previous Nuclear Cooperation  
2                             Agreement” means the Agreement for Cooperation  
3                             Between the Government of the United States of  
4                             America and the Government of the People’s Repub-  
5                             lic of China Concerning Peaceful Uses of Nuclear  
6                             Energy, concluded July 23, 1985.

7  
8                             (5) UNITED STATES.—The term “United  
9                             States” means the several States, the District of Co-  
10                             lumbia, and any territory or possession of the  
11                             United States.

12                             (6) UNITED STATES PERSON.—The term  
13                             “United States person” means any United States  
14                             citizen, any alien admitted to the United States for  
15                             permanent residence, any entity organized under the  
16                             laws of the United States or any jurisdiction within  
17                             the United States, including a foreign branch of  
18                             such an entity.

19                             (7) UNITED STATES-CHINA NUCLEAR COOPERA-  
20                             TION AGREEMENT.—The term “United States-China  
21                             Nuclear Cooperation Agreement” means the Agree-  
22                             ment for Cooperation Between the United States  
23                             and the Government of the People’s Republic of  
24                             China that was submitted to the appropriate con-  
25                             gressional committees under section 123 of the

1       Atomic Energy Act of 1954 (42 U.S.C. 2153) on  
2       April 21, 2015, and which entered into force on Oc-  
3       tober 29, 2015.

4 SEC. 4. NOTICE REGARDING TRANSFERS OF NUCLEAR  
5 TECHNOLOGY TO CHINA.

6        The Secretary of Energy shall, not later than 5 days  
7 after receiving an application for the proposed transfer of  
8 nuclear technology to China under section 57b. of the  
9 Atomic Energy Act of 1954 (42 U.S.C. 2077(b)), includ-  
10 ing an application for specific authorization to be provided  
11 for in a subsequent arrangement under section 131 of that  
12 Act (42 U.S.C. 2160), notify the appropriate congres-  
13 sional committees of the receipt of such application. The  
14 notice shall describe with particularity the items contained  
15 in the proposed transfer of nuclear technology.

16 SEC. 5. ADDITIONAL REQUIREMENT FOR APPROVAL OF RE-  
17 TRANSFERS OF UNITED STATES-ORIGIN  
18 TECHNOLOGY.

19       (a) IN GENERAL.—Any request for authorization to  
20 transfer United States-origin technology (as defined pur-  
21 suant to subsection (b)) from China, or with the signifi-  
22 cant participation of Chinese persons not located in the  
23 United States, to a country other than the United States  
24 or China, shall be subject to the authorization require-  
25 ments in section 57b. of the Atomic Energy Act of 1954

1 (42 U.S.C. 2077(b)). Furthermore, such requests for au-  
2 thorization shall be denied unless the applicant can dem-  
3 onstrate—

4                 (1) significant ongoing participation by United  
5 States persons in the transfer;

6                 (2) in the case of nuclear reactors and reactor  
7 components, significant United States content in-  
8 volved in, or attendant to, the proposed transfer;  
9 and

10                 (3) in the case of the transfer of technology de-  
11 veloped with the participation of the United States  
12 Government, timely and adequate reimbursement of  
13 the United States Government for any grants or  
14 loans provided by the United States Government to  
15 entities involved in the development of the tech-  
16 nology.

17                 (b) DEFINITION OF UNITED STATES-ORIGIN TECH-  
18 NOLOGY.—Not later than 90 days after the date of the  
19 enactment of this Act, the Secretary of Energy shall issue  
20 a definition of items covered by the term “United States-  
21 origin technology” in subsection (a), including items de-  
22 rived from such technology. The term shall include items  
23 developed by United States persons or persons subject to  
24 the jurisdiction of the United States, and items developed

1 with the participation of the United States Government,  
2 including large, passive light water reactors.

3 **SEC. 6. STATEMENT OF POLICY ON CHINA-PAKISTAN NU-**

4 **CLEAR COOPERATION.**

5 It is the policy of the United States—

6 (1) to oppose the provision by China of assistance in the construction of any nuclear reactor in  
7 Pakistan other than the first 2 reactors constructed  
8 at Chasma, which were consistent with the conditions concerning China's participation in the Nuclear  
9 Suppliers Group; and

10 (2) to assist Pakistan with the acquisition and  
11 development of sufficient electrical power to meet its  
12 domestic requirements for electrical power through  
13 means other than nuclear power.

14 **SEC. 7. ADDITIONAL NOTIFICATION REQUIREMENTS.**

15 (a) DETERMINATION REQUIRED.—Not later than  
16 180 days after the date of the enactment of this Act, and  
17 annually thereafter, the President, in consultation with the  
18 Secretary of State, the Secretary of Energy, the Secretary  
19 of Defense, and the Director of National Intelligence, shall  
20 determine whether the Government of China, persons acting  
21 on behalf of the Government of China, or Chinese persons have,  
22 since the entry into force of the United States-  
23 China Nuclear Cooperation Agreement—

1                   (1) retransferred any United States nuclear  
2 items to a third country without the permission of  
3 the United States Government;

4                   (2) diverted or attempted to divert United  
5 States nuclear items to military use;

6                   (3) stolen or attempted to steal United States  
7 nuclear items;

8                   (4) failed to undertake measures necessary to  
9 prevent transfers of goods, services, and technology  
10 described in section 2(a) of the Iran, North Korea,  
11 and Syria Nonproliferation Act (Public Law 106–  
12 178; 50 U.S.C. 1701 note), or to make substantial  
13 progress in preventing such transfers;

14                  (5) failed to undertake measures to enforce the  
15 sanctions provided for in United Nations Security  
16 Council Resolution 2270, adopted on March 2, 2016,  
17 and previous relevant resolutions recalled in Resolu-  
18 tion 2270;

19                  (6) refused to adhere to the Nuclear Suppliers  
20 Group guidelines regarding the export of any new ci-  
21 vilian nuclear reactors, regardless of any prior or fu-  
22 ture contract obligations; or

23                  (7) otherwise violated the terms and conditions  
24 of the United States-China Nuclear Cooperation  
25 Agreement, or any authorization issued by the

1       United States Government concerning transfers of  
2       United States nuclear items.

3           (b) SUSPENSION OF COOPERATION.—If the President  
4 makes a determination described in subsection (a), the  
5 President shall immediately suspend all cooperation under  
6 the United States-China Nuclear Cooperation Agreement,  
7 including any transfers of nuclear technology or materials,  
8 until the President submits to the appropriate congres-  
9 sional committees—

10              (1) a plan of corrective action to—

11                  (A) address the activity described in sub-  
12                  section (a);

13                  (B) mitigate any damage to the national  
14                  security of the United States because of such  
15                  activity; and

16                  (C) prevent further such activity; and

17              (2) a certification to the appropriate congres-  
18                  sional committees that the plan described in para-  
19                  graph (1) is being implemented.

20           (c) DEFINITION.—In this section, the term “United  
21       States nuclear items” means any items that are trans-  
22       ferred to China under—

23              (1) the United States-China Nuclear Coopera-  
24              tion Agreement;

- 1                   (2) section 57b. of the Atomic Energy Act of
- 2                   1954 (42 U.S.C. 2077(b)); or
- 3                   (3) part 110 of title 10, Code of Federal Regu-
- 4                   lations.

## 5 SEC. 8. IMPLEMENTATION OF AGREED MINUTE.

6        The President may not bring into effect the proce-  
7 dures described in the section of the Agreed Minute to  
8 the United States-China Nuclear Cooperation Agreement  
9 that appear under the heading “Technology and Informa-  
10 tion Exchanges” unless the President, at least 60 days  
11 of continuous session of Congress before those procedures  
12 become effective—

13                   (1) provides to the appropriate congressional  
14                   committees the details concerning the implementa-  
15                   tion of those provisions; and

22 SEC. 9. REPROCESSING UNDER THE UNITED STATES-CHINA  
23 NUCLEAR COOPERATION AGREEMENT.

24 (a) SENSE OF CONGRESS.—It is the sense of Con-  
25 gress that the United States should encourage countries

1 in East Asia to forgo the commencement of new spent fuel  
2 reprocessing activities, as part of a mutual effort to pre-  
3 vent the increased or expanded stockpiling of separated  
4 plutonium in the region.

5 (b) IMPLEMENTATION OF REPROCESSING CONSENT  
6 RIGHTS UNDER AGREEMENT.—The President shall not  
7 agree to the reprocessing, recycling, or other alteration in  
8 form or content of nuclear material, as described in Article  
9 6.2 of the United States-China Nuclear Cooperation  
10 Agreement, at any individual facility to which the Inter-  
11 national Atomic Energy Agency (IAEA) safeguards are  
12 not applied, unless, for each proposed facility at which  
13 such activity will take place, the President certifies to the  
14 appropriate congressional committees that—

15 (1) the President has made a formal request to  
16 the IAEA to apply safeguards to the facility;

17 (2) the IAEA has refused the request described  
18 in paragraph (1); and

19 (3) the arrangements and procedures under  
20 which such reprocessing, recycling, or other alter-  
21 ation in form or content will occur—

22 (A) include a requirement that nuclear ma-  
23 terial transferred pursuant to the United  
24 States-China Nuclear Cooperation Agreement

1           and nuclear material used in or produced  
2           through the use of such material—

3                 (i) not be commingled with any other  
4                 nuclear material;

5                 (ii) be clearly marked as United  
6                 States-obligated nuclear material;

7                 (iii) be stored in separate facilities  
8                 from any other nuclear material; and

9                 (iv) be available for inspection imme-  
10                 diately and without prior notice upon re-  
11                 quest by the IAEA or either party to the  
12                 agreement; and

13                 (B) are sufficient to detect in a timely  
14                 manner—

15                 (i) the diversion for military purposes  
16                 of nuclear material transferred pursuant to  
17                 the United States-China Nuclear Coopera-  
18                 tion Agreement and nuclear material used  
19                 in or produced through the use of such  
20                 material; and

21                 (ii) the transfer to facilities or loca-  
22                 tions not agreed to by the United States of  
23                 nuclear material transferred pursuant to  
24                 the United States-China Nuclear Coopera-  
25                 tion Agreement and nuclear material used

1                   in or produced through the use of such  
2                   material.

3                 (c) NOTIFICATION REQUIRED.—If the President  
4 issues a certification described in subsection (b), the Presi-  
5 dent shall include with that certification a detailed descrip-  
6 tion of—

7                   (1) the facility at which the reprocessing, recy-  
8                   cling, or other alteration in form and content will  
9                   take place;

10                  (2) the safeguards applied to the facility;

11                  (3) the measures that will be undertaken to se-  
12                  cure and prevent the theft or diversion to military  
13                  purposes of any separated plutonium that will result  
14                  from the activities at the facility;

15                  (4) the amounts of materials to be processed at  
16                  the facility;

17                  (5) the amount of processed fissile material  
18                  that might be stockpiled as a result of the activities  
19                  at the facility, and the estimated time that it may  
20                  be stockpiled prior to its civilian use in a nuclear re-  
21                  actor; and

22                  (6) the risks to United States national security  
23                  posed by the potential diversion of nuclear material  
24                  at the facility.

## 1 SEC. 10. REPORTS.

2 (a) INITIAL REPORT.—

11                   (2) ELEMENTS.—The report required under  
12 paragraph (1) shall include—

20 (C) an assessment of the likelihood of fu-  
21 ture violations under the terms of the United  
22 States-China Nuclear Cooperation Agreement;  
23 and

(D) an assessment of the potential advantages that a large civil nuclear infrastructure or program may provide the People's Republic of

1           China as it seeks to meet its future nuclear  
2           weapons requirements.

3           (b) ANNUAL INTELLIGENCE REPORT.—

4           (1) IN GENERAL.—Not later than April 15,  
5           2017, and annually thereafter, the Director of Na-  
6           tional Intelligence shall submit to the appropriate  
7           congressional committees a report on the status of  
8           the United States-China Nuclear Cooperation Agree-  
9           ment and compliance by China with the agreement.

10          (2) ELEMENTS.—The report required under  
11         paragraph (1) shall include, at a minimum—

12           (A) a detailed examination of every sus-  
13           pected or alleged violation of the Agreement by  
14           the People’s Republic of China that may have  
15           occurred during the prior calendar year;

16           (B) the response by China to any inquiries  
17           by the United States regarding any such sus-  
18           pected or alleged violations;

19           (C) an accounting of the specific roles  
20           played in the civil and military nuclear pro-  
21           grams of the People’s Republic of China by all  
22           Chinese persons visiting United States nuclear  
23           labs and facilities;

24           (D) an assessment of whether the People’s  
25           Republic of China or any entity acting on its

1 behalf has targeted and United States nuclear-  
2 related private-sector or governmental entities,  
3 enterprises, or assets for any form of cyber  
4 trespass, theft, or attack, or has taken specific  
5 actions pursuant to such targeting by any enti-  
6 ty;

7 (E) an assessment of the risks of diversion  
8 of special nuclear material transferred pursuant  
9 to this Agreement, the likely consequences of  
10 such diversion, and steps taken to avert any po-  
11 tential diversion;

12 (F) an assessment of the potential military  
13 utility of diverted civil nuclear technology;

14 (G) an assessment of any civil and criminal  
15 law enforcement actions taken by the People's  
16 Republic of China's against any entities or indi-  
17 viduals within its government or its jurisdiction  
18 that have—

19 (i) violated non-proliferation or peace-  
20 ful use requirements of this or any other  
21 bilateral or multilateral nuclear agreement  
22 to which People's Republic of China is a  
23 party;

24 (ii) committed cyber trespass, theft, or  
25 attack on any United States nuclear-re-

1                    lated private sector or governmental enti-  
2                    ties, enterprises, or assets; or

3                         (iii) conducted cyber trespass or cyber  
4                        exploitation against any private sector nu-  
5                        clear entities, enterprises, or assets for  
6                        commercial gain; and

7                        (H) a description of the extent to which  
8                        the Government of the People's Republic of  
9                        China has honored United States requests for  
10                       enforcement of United States legal action  
11                       against any entities or individuals described in  
12                       subparagraph (G), including requests for extra-  
13                       dition by the United States.

14                       (c) FORM.—The reports required under subsections  
15                       (a) and (b) may be submitted in classified form, but shall  
16                       also contain an unclassified executive summary and may  
17                       contain an unclassified annex.

18                       (d) ANNUAL EXPORTS REPORT.—Not later than  
19                       April 15, 2017, and annually thereafter, the President  
20                       shall submit to the appropriate congressional committees  
21                       a report that—

22                                 (1) identifies all export licenses issued in the  
23                       previous calendar year pursuant to the United  
24                       States-China Nuclear Cooperation Agreement, in-  
25                       cluding at a minimum, the license applicant, pro-

1       posed end user, items licensed, value, and term of  
2       the license; and

3               (2) assesses China's progress in strengthening,  
4       implementing, and enforcing laws to ensure re-  
5       stricted dual-use technology is not transferred to  
6       countries of proliferation concern.

○